

**Gates & Cooper** LLPHoward Hughes Center  
6701 Center Drive West, Suite 1050  
Los Angeles, California 90045RECEIVED  
CENTRAL FAX CENTER

MAY 23 2005

**FAX TRANSMISSION TO USPTO**TO: Commissioner for Patents  
Attn: Examiner Andrew J. Rudy  
Patent Examining Corps  
Facsimile Center  
Alexandria, VA 22313-1450FROM: George H. Gates  
OUR REF.: 8980  
TELEPHONE: (310) 642-4146Total pages, including cover letter: 30PTO FAX NUMBER: 703 872-9306RECEIVED  
MAY 25 2005  
OIPF/JCWS

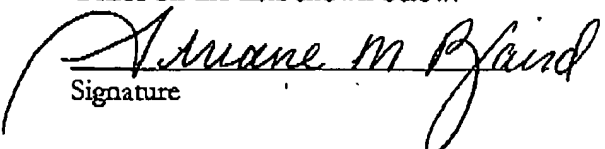
If you do NOT receive all of the pages, please telephone us at (310) 641-8797, or fax us at (310) 641-8798.

Title of Document Transmitted:	TRANSMITTAL DOCUMENTS, BRIEF OF APPELLANTS AND AUTHORIZATION TO CHARGE THE DEPOSIT ACCOUNT IN THE AMOUNT OF \$500 (APPEAL BRIEF FEE)
Applicant:	George R. Hood et al.
Serial No.:	09/610,646
Filed:	June 29, 2000
Group Art Unit:	3627
Title:	BASIC AND INTERMEDIATE NET INTEREST REVENUE IMPLEMENTATIONS FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM
Our Ref. No.:	8980

Please charge all fees to Deposit Account No. 14-0225 of NCR Corporation, the assignee of the present application.

By: Name: George H. Gates  
Reg. No.: 33,500

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.

  
Signature5/23/05  
Date

GIIG/amb

G&amp;C 30145.397-US-01

MAY 23 2005

Due Date: May 23, 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	George R. Hood et al.	Examiner:	Andrew J. Rudy
Serial No.:	09/610,646	Group Art Unit:	3627
Filed:	June 29, 2000	Docket:	8980
Title:	BASIC AND INTERMEDIATE NET INTEREST REVENUE IMPLEMENTATIONS FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM		

CERTIFICATE OF MAILING OR TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being filed via facsimile transmission to the U.S. Patent and Trademark Office on May 23, 2005.

By: [Signature]  
Name: George H. Gates

## MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

We are transmitting herewith the attached:

- ☒ Transmittal sheet, in duplicate, containing a Certificate of Mailing or Transmission under 37 CFR 1.8.
- ☒ Brief of Appellant(s).
- ☒ Charge the Fee for the Brief of Appellant(s) in the amount of \$500.00 to the Deposit Account.

Please consider this a **PETITION FOR EXTENSION OF TIME** for a sufficient number of months to enter these papers, if appropriate.

Please charge all fees to Deposit Account No. 14-0225 of NCR Corporation (the assignee of the present application). A duplicate of this paper is enclosed.

**GATES & COOPER LLP**  
Howard Hughes Center  
6701 Center Drive West, Suite 1050  
Los Angeles, CA 90045  
(310) 641-8797

By: [Signature]  
Name: George H. Gates  
Reg. No.: 33,500  
GHG/amb



MAY 23 2005

Due Date: May 23, 2005

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	)	
	)	
Inventor: George R. Hood et al.	)	Examiner: Andrew J. Rudy
	)	
Serial #: 09/610,646	)	Group Art Unit: 3627
	)	
Filed: June 29, 2000	)	Appeal No.: _____
	)	
Title: BASIC AND INTERMEDIATE NET	)	
INTEREST REVENUE	)	
IMPLEMENTATIONS FOR FINANCIAL	)	
PROCESSING IN A RELATIONAL	)	
<u>DATABASE MANAGEMENT SYSTEM</u>	)	

**BRIEF OF APPELLANTS**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR §41.37, Appellants' attorney hereby submits the Brief of Appellants on appeal from the final rejection in the above-identified application as set forth in the Office Action dated November 23, 2004.

Please charge the amount of \$500.00 to cover the required fee for filing this Brief as set forth under 37 CFR §41.20(b)(2) to Deposit Account No. 14-0225 of NCR Corporation, the assignee of the present application. Also, please charge any additional fees or credit any overpayments to Deposit Account No. 14-0225.

**I. REAL PARTY IN INTEREST**

The real party in interest is NCR Corporation, the assignee of the present application.

05/25/2005 EAREGAY1 00000030 140225 09610646

1

30145.397-US-01

01 FC:1402 500.00 DA

## II. RELATED APPEALS AND INTERFERENCES

There are related appeals in the following co-pending and commonly-assigned patent applications:

Application Serial No. 09/608,355, filed on June 29, 2000, by George R. Hood et al., entitled ADVANCED AND BREAKTHROUGH NET INTEREST REVENUE IMPLEMENTATION FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM, attorney's docket number 9006 (30145.401US01);

Application Serial No. 09/943,059, filed on August 30, 2001, by Paul H. Phibbs, Jr., entitled ALLOCATED BALANCES IN A NET INTEREST REVENUE IMPLEMENTATION FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM, attorney's docket number 9512 (30145.405USU1);

Application Serial No. 09/608,682, filed on June 29, 2000, by George R. Hood, entitled RISK PROVISION IMPLEMENTATION FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM, attorney's docket number 9015 (30145.392US01); and

Application Serial No. 09/608,681, filed on June 29, 2000, by George R. Hood et al., entitled OTHER REVENUE IMPLEMENTATION FOR FINANCIAL PROCESSING IN A RELATIONAL DATABASE MANAGEMENT SYSTEM, attorney's docket number 9015 (30145.391US01).

## III. STATUS OF CLAIMS

Claims 1-66 are pending in the application.

Claims 1-66 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of "College Accounting, Seventh Edition," to Price.

Claims 1-66 are being appealed.

## IV. STATUS OF AMENDMENTS

No amendments have been made subsequent to the final Office Action.

## V. SUMMARY OF THE INVENTION

Appellants' independent claims 1, 23 and 24 are generally directed to an invention that performs financial processing in a computer.

Independent claim 1 recites a method of performing financial processing in a computer. The method includes accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status. The method also includes performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}.\end{aligned}$$

The Net Interest Revenue (NIR) is calculated as:

$$\begin{aligned}\text{NIR} &= \text{Interest Revenue} \\ &- \text{Cost of Funds} \\ &+ \text{Value of Funds} \\ &- \text{Interest Expense}.\end{aligned}$$

Independent claim 23 recites a system for financial processing. The system includes a computer and logic performed by the computer. The logic includes accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status. The logic also includes performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from

the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}.\end{aligned}$$

The Net Interest Revenue (NIR) is calculated as:

$$\begin{aligned}\text{NIR} &= \text{Interest Revenue} \\ &- \text{Cost of Funds} \\ &+ \text{Value of Funds} \\ &- \text{Interest Expense}.\end{aligned}$$

Independent claim 24 recites an article of manufacture embodying logic for performing financial processing in a computer. The logic includes accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status. The logic also includes performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}.\end{aligned}$$

The Net Interest Revenue (NIR) is calculated as:

$$\begin{aligned}\text{NIR} &= \text{Interest Revenue} \\ &- \text{Cost of Funds}\end{aligned}$$

- + Value of Funds
- Interest Expense.

• With regard to the claims, Appellants' attorney requests that the Board refer to the specification generally. Specific portions of the specification that directly relate to the claims on appeal include:

- (a) at page 4, line 17 through page 6, line 32;
- (b) at page 9, line 1 through page 14, line 16, and in FIG. 2 as reference numbers 200-214;
- (c) at page 15, line 8 through page 25, line 19, and in FIG. 3; and
- (d) at page 27, line 1 through page 29, line 15, and in FIG. 4 as reference number 414.

#### VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1-66 are obvious under 35 U.S.C. §103(a) in view of "College Accounting, Seventh Edition," to Price.

#### VII. ARGUMENTS

##### A. The Office Action Rejections

In paragraph (3) of the Office Action, claims 1-66 were rejected under 35 U.S.C. §103(a) as being unpatentable over Price et al., "College Accounting, Seventh Edition," (Price).

Appellants' attorney respectfully traverses these rejections.

##### B. Appellants' Independent Claims

As noted above, Appellants' independent claims 1, 23 and 24 are generally directed to an invention that performs financial processing in a computer. Claim 1 is representative and comprises the steps of:

- (a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

Profit = Net Interest Revenue (NIR)  
+ Other Revenue (OR)  
- Direct Expense (DE)  
- Indirect Expense (IE)  
- Risk Provision (RP)

(c) wherein the Net Interest Revenue (NIR) is calculated as:

NIR = Interest Revenue  
- Cost of Funds  
+ Value of Funds  
- Interest Expense.

C. The Price Reference

Price is a college accounting textbook that describes accounting concepts and principles. The portions cited describe analyzing business transactions including the accounting cycle, accounting for assets and liabilities including accounts receivable and uncollectible accounts, and responsibility and cost accounting including departmentalized profit and cost centers.

D. Arguments Directed To The First Grounds for Rejection: Whether Claims 1-66 Are Obvious Under 35 U.S.C. §103(a) In View of Price.

1. Claims 1, 23 and 24

Appellants' attorney respectfully submits that Appellants' claimed invention is patentable over the Price reference. Specifically, Appellants' attorney asserts that the reference does not teach or suggest the specific combination of elements recited in Appellants' claims.

However, the Office Action asserts the following:

Claims 1-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. "College Accounting, Seventh Edition" (hereafter "Price")



Price discloses, e.g. pgs 28-41, 529, 531, 966-982 (Fig. 27-5), a method measuring profit based on the factors of net interest revenue, other revenues (Fig. 27-5, line 4, "Operating Revenues"), direct expenses (Fig. 27-5, line 22, "Direct Expenses"), indirect expenses (Fig. 27-5, line 30, "Indirect Expenses"), and risk (Fig. 27-5, line 6, "Less Sales Returns and Allowances"), all set up to take advantage of flexible business rules.

Official Notice is taken that performing financial processing using computer software is common knowledge in the art.

To have provided a method of performing financial processing for an account using software for a computer measuring profit based on the factors of net interest revenue, other revenues, direct expenses, indirect expenses and risk, all set up to take advantage of flexible business rules the business rules to calculate known variations of one of the factors, e.g. risk provisions, would have been obvious to one of ordinary skill in the art. Doing such would incorporate common knowledge data along with common knowledge software.

Appellants' August 13, 2004 and January 29, 2004 REMARKS have been reviewed, but are not convincing. In short, Appellants' profitability calculations are common knowledge variance for defining total income less total expenses. The account, event and organization attributes, e.g., net interest revenue, claimed have been common knowledge criteria used within the business community for a period of time far exceeding Appellants' filing date. To have incorporated such common knowledge in the profitability calculations for Price, as modified by Official Notice, would have been obvious to one of ordinary skill in the art.

Appellants' attorney disagrees with this analysis.

Price does not teach or suggest the claimed elements of accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status, and performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

Profit	=	Net Interest Revenue (NIR)
	+	Other Revenue (OR)
	-	Direct Expense (DE)
	-	Indirect Expense (IE)

- Risk Provision (RP)

More specifically, Price does not teach or suggest the claimed profitability calculations wherein the Net Interest Revenue (NIR) is calculated as:

$$\begin{array}{rcl} \text{NIR} & = & \text{Interest Revenue} \\ & - & \text{Cost of Funds} \\ & + & \text{Value of Funds} \\ & - & \text{Interest Expense.} \end{array}$$

Instead, the "Net Interest Revenue" is only referred to generally by the Office Action, no specification citation to Price is made with regard to this element, and nowhere does the reference teach or suggest the limitations of these claims. Consequently, the rejections fail to persuade.

Appellants' claimed invention provides operational advantages over the system disclosed in Price. Price reflects an outdated approach to income statements. Appellants' invention, on the other hand, describes a different, more sophisticated model for implementing profitability calculations in a computer system, as well as a different, more sophisticated set of relationships between the elements of the model. Price fails to teach or suggest the specific model, all of the elements of the model, or the relationships between the various elements.

Thus, Appellants' attorney submits that independent claims 1, 23 and 24 are allowable over Price. Further, dependent claims 2-22 and 25-66 are submitted to be allowable over Price in the same manner, because they are dependent on independent claims 1, 23 and 24, respectively, and because they contain all the limitations of the independent claims. In addition, dependent claims 2-22 and 25-66 recite additional novel elements not shown by Price.

2. Claims 2, 25 and 46

Claims 2, 25 and 46 recite that the Net Interest Revenue is calculated for every account. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

3. Claims 3, 26 and 47

Claims 3, 26 and 47 recite that the Net Interest Revenue represents a total interest generated from all deposit and lending activities. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

4. Claims 4, 27 and 48

Claims 4, 27 and 48 recite that the Net Interest Revenue is calculated from a Deposit Spread, a Lending Spread, and an Asset/Liability Management (ALM) Spread. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

5. Claims 5, 28 and 49

Claims 5, 28 and 49 recite that the Deposit Spread comprises a difference between the Interest Expense and the Value of Funds. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

6. Claims 6, 29 and 50

Claims 6, 29 and 50 recite that the Interest Expense comprises a cost of borrowing funds. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations.

Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

7. Claims 7, 30 and 51

Claims 7, 30 and 51 recite that the Value of Funds represents a rate at which borrowed funds could be invested. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

8. Claims 8, 31 and 52

Claims 8, 31 and 52 recite that the Lending Spread comprises a difference between the Cost of Funds and the Interest Revenue. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

9. Claims 9, 32 and 53

Claims 9, 32 and 53 recite that the Interest Revenue comprises a return generated by lending funds. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

10. Claims 10, 33 and 54

Claims 10, 33 and 54 recite that the Costs of Funds represents an expense generated by lending funds. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching

these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

11. Claims 11, 34 and 55

Claims 11, 34 and 55 recite that the Asset/Liability Management Spread comprises a difference between maturity characteristics of funds lent. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

12. Claims 12, 35 and 56

Claims 12, 35 and 56 recite that the Net Interest Revenue also includes earnings on allocated equity. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

13. Claims 13, 36 and 57

Claims 13, 36 and 57 recite that the earnings on allocated equity comprise earnings generated by lending funds from equity sources. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

14. Claims 14, 37 and 58

Claims 14, 37 and 58 recite calculating the Net Income Revenue in a Basic Tier according to:

$$IR(a) = AAB(a) * \text{eff rate}_{\text{asset}}(a),$$

$$COF(a) = AAB(a) * TR_p,$$

$$IE(a) = ALB(a) * \text{eff rate}_{\text{liability}}(a), \text{ and}$$

$$VOF(a) = ALB(a) * TR_p$$

wherein:

AAB(a) = Average Asset Balance of an account a,

ALB(a) = Average Liability Balance of the account a,

eff rate<sub>asset</sub>(a) = Effective interest rate for the account a as an asset balance,

eff rate<sub>liability</sub>(a) = Effective interest rate for the account a as a liability balance,

TR<sub>p</sub> = Treatment Rate for a product type p,

IR(a) = the Interest Revenue of the account a,

COF(a) = the Cost of Funds for the account a,

IE(a) = the Interest Expense for the account a, and

VOF(a) = the Value of Funds for the account a.

The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

#### 15. Claims 15, 38 and 59

Claims 15, 38 and 59 recite that there is a single Treatment Rate for each product type. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

#### 16. Claims 16, 39 and 60

Claims 16, 39 and 60 recite calculating the Net Income Revenue in the Basic Tier generates one or more outputs selected from a group comprising the Interest Revenue, Interest

Expense, Cost of Funds, Value of Funds, Lending Spread, and Deposit Spread. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

#### 17. Claims 17, 40 and 61

Claims 17, 40 and 61 recite calculating the Net Income Revenue in an Intermediate Tier according to:

$$\begin{aligned} IR(a) &= \sum AB(c=\text{asset},s,t)(a) * \text{eff rate}(c=\text{asset},s,t)(a), \\ COF(a) &= \sum AB(c=\text{asset},s,t)(a) * TR(c=\text{asset},s,t)(pt(a)), \\ IE(a) &= \sum AB(c=\text{liability},s,t)(a) * \text{eff rate}(c=\text{liability},s,t)(a), \text{ and} \\ VOF(a) &= \sum AB(c=\text{liability},s,t)(a) * TR(c=\text{liability},s,t)(pt(a)), \end{aligned}$$

wherein:

$AB(c,s,t)(a)$  = Average Balances of an account a based on class (c), state (s), and tier (t) characteristics of a balance type,

$\text{eff rate}(c,s,t)(a)$  = Effective interest rate for the account a based on the class (c), state (s), and tier (t) characteristics of the balance type,

$pt(a)$  = Product type of an account a,

$TR(c,s,t)(pt(a))$  = Treatment Rate for the accounts a of the product type based on the class (c), state (s), and tier (t) characteristics of the balance type,

$IR(a)$  = the Interest Revenue of the account a,

$COF(a)$  = the Cost of Funds for the account a,

$IE(a)$  = the Interest Expense for the account a, and

$VOF(a)$  = the Value of Funds for the account a.

The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

18. Claims 18, 41 and 62

Claims 18, 41 and 62 recite that the balance type comprises a combined effect of the class, state, and tier characteristics. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

19. Claims 19, 42 and 63

Claims 19, 42 and 63 recite that the class characteristic is defined as either an asset or liability. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

20. Claims 20, 43 and 64

Claims 20, 43 and 64 recite that the state characteristic is defined as either cleared, ledger, or float. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

21. Claims 21, 44 and 65

Claims 21, 44 and 65 recite that the tier characteristic is defined as tiers used by the organization in supplying balances. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.



22. Claims 22, 45 and 66

Claims 22, 45 and 66 recite calculating the Net Income Revenue in the Basic Tier generates one or more outputs selected from a group comprising the Interest Revenue, Interest Expense, Cost of Funds, Value of Funds, Lending Spread, and Deposit Spread. The Office Action rejects these claims only generally, i.e., on the same basis as the independent claims, without citing any specific location within the reference as teaching these limitations. Appellants' attorney disagrees with this analysis, and submits that nowhere does the reference teach or suggest the limitations of these claims.

VIII. CONCLUSION

In light of the above arguments, Appellants' attorney respectfully submits that the cited references do not anticipate nor render obvious the claimed invention. More specifically, Appellants' claims recite novel physical features which patentably distinguish over any and all references under 35 U.S.C. §§ 102 and 103.

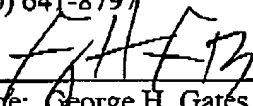
As a result, a decision by the Board of Patent Appeals and Interferences reversing the Examiner and directing allowance of the pending claims in the subject application is respectfully solicited.

Respectfully submitted,

GATES & COOPER LLP  
Attorneys for Appellants

Howard Hughes Center  
6701 Center Drive West, Suite 1050  
Los Angeles, California 90045  
(310) 641-8797

Date: May 23, 2005

By:   
Name: George H. Gates  
Reg. No.: 33,500

GHG/amb

## APPENDIX

1. A method of performing financial processing in a computer, comprising:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}\end{aligned}$$

(c) wherein the Net Interest Revenue (NIR) is calculated as:

$$\begin{aligned}\text{NIR} &= \text{Interest Revenue} \\ &- \text{Cost of Funds} \\ &+ \text{Value of Funds} \\ &- \text{Interest Expense.}\end{aligned}$$

2. The method of claim 1, wherein the Net Interest Revenue is calculated for every account.

3. The method of claim 1, wherein the Net Interest Revenue represents a total interest generated from all deposit and lending activities.

4. The method of claim 1, wherein the Net Interest Revenue is calculated from a Deposit Spread, a Lending Spread, and an Asset/Liability Management (ALM) Spread.

5. The method of claim 4, wherein the Deposit Spread comprises a difference between the Interest Expense and the Value of Funds.

6. The method of claim 5, wherein the Interest Expense comprises a cost of borrowing funds.

7. The method of claim 5, wherein the Value of Funds represents a rate at which borrowed funds could be invested.

8. The method of claim 4, wherein the Lending Spread comprises a difference between the Cost of Funds and the Interest Revenue.

9. The method of claim 8, wherein the Interest Revenue comprises a return generated by lending funds.

10. The method of claim 8, wherein the Costs of Funds represents an expense generated by lending funds.

11. The method of claim 4, wherein the Asset/Liability Management Spread comprises a difference between maturity characteristics of funds lent.

12. The method of claim 1, wherein the Net Interest Revenue also includes earnings on allocated equity.

13. The method of claim 12, wherein the earnings on allocated equity comprise earnings generated by lending funds from equity sources.

14. The method of claim 1, further comprising calculating the Net Income Revenue in a Basic Tier according to:

$$IR(a) = AAB(a) * \text{eff rate}_{\text{asset}}(a),$$

$$COF(a) = AAB(a) * TR_p,$$

$$IE(a) = ALB(a) * \text{eff rate}_{\text{liability}}(a), \text{ and}$$

$$VOF(a) = ALB(a) * TR_p$$

wherein:

AAB(a) = Average Asset Balance of an account a,

ALB(a) = Average Liability Balance of the account a,

eff rate<sub>asset</sub>(a) = Effective interest rate for the account a as an asset balance,

eff rate<sub>liability</sub>(a) = Effective interest rate for the account a as a liability balance,

TR<sub>p</sub> = Treatment Rate for a product type p,

IR(a) = the Interest Revenue of the account a,

COF(a) = the Cost of Funds for the account a,

IE(a) = the Interest Expense for the account a, and

VOF(a) = the Value of Funds for the account a.

15. The method of claim 14, wherein there is a single Treatment Rate for each product type.

16. The method of claim 14, wherein the step of calculating the Net Income Revenue in the Basic Tier generates one or more outputs selected from a group comprising the Interest Revenue, Interest Expense, Cost of Funds, Value of Funds, Lending Spread, and Deposit Spread.

17. The method of claim 1, further comprising calculating the Net Income Revenue in an Intermediate Tier according to:

$$IR(a) = \sum AB(c=\text{asset}, s, t)(a) * \text{eff rate}(c=\text{asset}, s, t)(a),$$

$$COF(a) = \sum AB(c=\text{asset}, s, t)(a) * TR(c=\text{asset}, s, t)(pt(a)),$$

$$IE(a) = \sum AB(c=\text{liability}, s, t)(a) * \text{eff rate}(c=\text{liability}, s, t)(a), \text{ and}$$

$$VOF(a) = \sum AB(c=\text{liability}, s, t)(a) * TR(c=\text{liability}, s, t)(pt(a)),$$

wherein:

AB(c,s,t)(a) = Average Balances of an account a based on class (c), state (s), and tier (t) characteristics of a balance type,

eff rate(c,s,t)(a) = Effective interest rate for the account a based on the class (c), state (s), and tier (t) characteristics of the balance type,

pt(a) = Product type of an account a,

TR(c,s,t)(pt(a)) = Treatment Rate for the accounts a of the product type based on the class (c), state (s), and tier (t) characteristics of the balance type,

IR(a) = the Interest Revenue of the account a,

COF(a) = the Cost of Funds for the account a,

IE(a) = the Interest Expense for the account a, and

VOF(a) = the Value of Funds for the account a.

18. The method of claim 17, wherein the balance type comprises a combined effect of the class, state, and tier characteristics.

19. The method of claim 18, wherein the class characteristic is defined as either an asset or liability.

20. The method of claim 18, wherein the state characteristic is defined as either cleared, ledger, or float.

21. The method of claim 18, wherein the tier characteristic is defined as tiers used by the organization in supplying balances.

22. The method of claim 17, wherein the step of calculating the Net Income Revenue in the Basic Tier generates one or more outputs selected from a group comprising the Interest Revenue, Interest Expense, Cost of Funds, Value of Funds, Lending Spread, and Deposit Spread.

23. A system for financial processing, comprising:  
a computer;  
logic, performed by the computer, for:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's

financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}\end{aligned}$$

(c) wherein the Net Interest Revenue (NIR) is calculated as:

$$\begin{aligned}\text{NIR} &= \text{Interest Revenue} \\ &- \text{Cost of Funds} \\ &+ \text{Value of Funds} \\ &- \text{Interest Expense.}\end{aligned}$$

24. An article of manufacture embodying logic for performing financial processing in a computer, comprising:

(a) accessing account, event and organization attributes from a database accessible by the computer, wherein: (1) the account attributes comprise data about accounts being measured, (2) the event attributes comprise data about account-related transactions, and (3) the organization attributes comprise data about the organization's financial status;

(b) performing one or more profitability calculations in the computer using the account, event and organization attributes accessed from the database, as well as one or more profit factors and one or more rules, wherein the profitability calculations include:

$$\begin{aligned}\text{Profit} &= \text{Net Interest Revenue (NIR)} \\ &+ \text{Other Revenue (OR)} \\ &- \text{Direct Expense (DE)} \\ &- \text{Indirect Expense (IE)} \\ &- \text{Risk Provision (RP)}\end{aligned}$$

(c) wherein the Net Interest Revenue (NIR) is calculated as:

$$\text{NIR} = \text{Interest Revenue}$$

- Cost of Funds
- + Value of Funds
- Interest Expense.

25. The system of claim 23, wherein the Net Interest Revenue is calculated for every account.

26. The system of claim 23, wherein the Net Interest Revenue represents a total interest generated from all deposit and lending activities.

27. The system of claim 23, wherein the Net Interest Revenue is calculated from a Deposit Spread, a Lending Spread, and an Asset/Liability Management (ALM) Spread.

28. The system of claim 27, wherein the Deposit Spread comprises a difference between the Interest Expense and the Value of Funds.

29. The system of claim 28, wherein the Interest Expense comprises a cost of borrowing funds.

30. The system of claim 28, wherein the Value of Funds represents a rate at which borrowed funds could be invested.

31. The system of claim 27, wherein the Lending Spread comprises a difference between the Cost of Funds and the Interest Revenue.

32. The system of claim 31, wherein the Interest Revenue comprises a return generated by lending funds.

33. The system of claim 31, wherein the Costs of Funds represents an expense generated by lending funds.

34. The system of claim 27, wherein the Asset/Liability Management Spread comprises a difference between maturity characteristics of funds lent.

35. The system of claim 23, wherein the Net Interest Revenue also includes earnings on allocated equity.

36. The system of claim 35, wherein the earnings on allocated equity comprise earnings generated by lending funds from equity sources.

37. The system of claim 23, further comprising logic for calculating the Net Income Revenue in a Basic Tier according to:

$$IR(a) = AAB(a) * \text{eff rate}_{\text{asset}}(a),$$

$$COF(a) = AAB(a) * TR_p,$$

$$IE(a) = ALB(a) * \text{eff rate}_{\text{liability}}(a), \text{ and}$$

$$VOF(a) = ALB(a) * TR_p$$

wherein:

AAB(a) = Average Asset Balance of an account a,

ALB(a) = Average Liability Balance of the account a,

eff rate<sub>asset</sub>(a) = Effective interest rate for the account a as an asset balance,

eff rate<sub>liability</sub>(a) = Effective interest rate for the account a as a liability balance,

TR<sub>p</sub> = Treatment Rate for a product type p,

IR(a) = the Interest Revenue of the account a,

COF(a) = the Cost of Funds for the account a,

IE(a) = the Interest Expense for the account a, and

VOF(a) = the Value of Funds for the account a.

38. The system of claim 37, wherein there is a single Treatment Rate for each product type.

39. The system of claim 37, wherein the logic for calculating the Net Income Revenue in the Basic Tier generates one or more outputs selected from a group comprising the



Interest Revenue, Interest Expense, Cost of Funds, Value of Funds, Lending Spread, and Deposit Spread.

40. The system of claim 23, further comprising logic for calculating the Net Income Revenue in an Intermediate Tier according to:

$$\begin{aligned} IR(a) &= \sum AB(c=asset, s, t)(a) * eff\ rate(c=asset, s, t)(a), \\ COF(a) &= \sum AB(c=asset, s, t)(a) * TR(c=asset, s, t)(pt(a)), \\ IE(a) &= \sum AB(c=liability, s, t)(a) * eff\ rate(c=liability, s, t)(a), \text{ and} \\ VOF(a) &= \sum AB(c=liability, s, t)(a) * TR(c=liability, s, t)(pt(a)), \end{aligned}$$

wherein:

$AB(c, s, t)(a)$  = Average Balances of an account a based on class (c), state (s), and tier (t) characteristics of a balance type,

$eff\ rate(c, s, t)(a)$  = Effective interest rate for the account a based on the class (c), state (s), and tier (t) characteristics of the balance type,

$pt(a)$  = Product type of an account a,

$TR(c, s, t)(pt(a))$  = Treatment Rate for the accounts a of the product type based on the class (c), state (s), and tier (t) characteristics of the balance type,

$IR(a)$  = the Interest Revenue of the account a,

$COF(a)$  = the Cost of Funds for the account a,

$IE(a)$  = the Interest Expense for the account a, and

$VOF(a)$  = the Value of Funds for the account a.

41. The system of claim 40, wherein the balance type comprises a combined effect of the class, state, and tier characteristics.

42. The system of claim 41, wherein the class characteristic is defined as either an asset or liability.

43. The system of claim 41, wherein the state characteristic is defined as either cleared, ledger, or float.

44. The system of claim 41, wherein the tier characteristic is defined as tiers used by the organization in supplying balances.

45. The system of claim 40, wherein the step of logic for calculating the Net Income Revenue in the Basic Tier generates one or more outputs selected from a group comprising the Interest Revenue, Interest Expense, Cost of Funds, Value of Funds, Lending Spread, and Deposit Spread.

46. The article of claim 24, wherein the Net Interest Revenue is calculated for every account.

47. The article of claim 24, wherein the Net Interest Revenue represents a total interest generated from all deposit and lending activities.

48. The article of claim 24, wherein the Net Interest Revenue is calculated from a Deposit Spread, a Lending Spread, and an Asset/Liability Management (ALM) Spread.

49. The article of claim 48, wherein the Deposit Spread comprises a difference between the Interest Expense and the Value of Funds.

50. The article of claim 49, wherein the Interest Expense comprises a cost of borrowing funds.

51. The article of claim 49, wherein the Value of Funds represents a rate at which borrowed funds could be invested.

52. The article of claim 48, wherein the Lending Spread comprises a difference between the Cost of Funds and the Interest Revenue.

53. The article of claim 52, wherein the Interest Revenue comprises a return generated by lending funds.

54. The article of claim 52, wherein the Costs of Funds represents an expense generated by lending funds.

55. The article of claim 48, wherein the Asset/Liability Management Spread comprises a difference between maturity characteristics of funds lent.

56. The article of claim 24, wherein the Net Interest Revenue also includes earnings on allocated equity.

57. The article of claim 56, wherein the earnings on allocated equity comprise earnings generated by lending funds from equity sources.

58. The article of claim 24, further comprising calculating the Net Income Revenue in a Basic Tier according to:

$$IR(a) = AAB(a) * \text{eff rate}_{\text{asset}}(a),$$

$$COF(a) = AAB(a) * TR_p,$$

$$IE(a) = ALB(a) * \text{eff rate}_{\text{liability}}(a), \text{ and}$$

$$VOF(a) = ALB(a) * TR_p$$

wherein:

AAB(a) = Average Asset Balance of an account a,

ALB(a) = Average Liability Balance of the account a,

eff rate<sub>asset</sub>(a) = Effective interest rate for the account a as an asset balance,

eff rate<sub>liability</sub>(a) = Effective interest rate for the account a as a liability balance,

TR<sub>p</sub> = Treatment Rate for a product type p,

IR(a) = the Interest Revenue of the account a,

COF(a) = the Cost of Funds for the account a,

IE(a) = the Interest Expense for the account a, and

VOF(a) = the Value of Funds for the account a.

59. The article of claim 58, wherein there is a single Treatment Rate for each product type.

60. The article of claim 58, wherein the step of calculating the Net Income Revenue in the Basic Tier generates one or more outputs selected from a group comprising the Interest Revenue, Interest Expense, Cost of Funds, Value of Funds, Lending Spread, and Deposit Spread.

61. The article of claim 24, further comprising calculating the Net Income Revenue in an Intermediate Tier according to:

$$\begin{aligned} IR(a) &= \sum AB(c=asset, s, t)(a) * eff\ rate(c=asset, s, t)(a), \\ COF(a) &= \sum AB(c=asset, s, t)(a) * TR(c=asset, s, t)(pt(a)), \\ IE(a) &= \sum AB(c=liability, s, t)(a) * eff\ rate(c=liability, s, t)(a), \text{ and} \\ VOF(a) &= \sum AB(c=liability, s, t)(a) * TR(c=liability, s, t)(pt(a)), \end{aligned}$$

wherein:

$AB(c, s, t)(a)$  = Average Balances of an account a based on class (c), state (s), and tier (t) characteristics of a balance type,

$eff\ rate(c, s, t)(a)$  = Effective interest rate for the account a based on the class (c), state (s), and tier (t) characteristics of the balance type,

$pt(a)$  = Product type of an account a,

$TR(c, s, t)(pt(a))$  = Treatment Rate for the accounts a of the product type based on the class (c), state (s), and tier (t) characteristics of the balance type,

$IR(a)$  = the Interest Revenue of the account a,

$COF(a)$  = the Cost of Funds for the account a,

$IE(a)$  = the Interest Expense for the account a, and

$VOF(a)$  = the Value of Funds for the account a.

62. The article of claim 61, wherein the balance type comprises a combined effect of the class, state, and tier characteristics.

63. The article of claim 62, wherein the class characteristic is defined as either an asset or liability.

64. The article of claim 62, wherein the state characteristic is defined as either cleared, ledger, or float.

65. The article of claim 62, wherein the tier characteristic is defined as tiers used by the organization in supplying balances.

66. The article of claim 61, wherein the step of calculating the Net Income Revenue in the Basic Tier generates one or more outputs selected from a group comprising the Interest Revenue, Interest Expense, Cost of Funds, Value of Funds, Lending Spread, and Deposit Spread.